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Conference Abstract

An Example of Synergy in Data Mobilization: the Arctos-VertNet Nexus

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Abstract

Over the past two decades, the natural history collections community has ramped up efforts to mobilize museum data in order to increase access for biodiversity research. The willingness of collections to participate in these efforts has exceeded expectations and requires a close collaboration between museum staff, database managers, and informatics specialists. Major challenges to the discovery of biodiversity information through mobilization involve disparity in data format, consistent use of vocabulary, and completeness. These differences in data quality among collections require the development of informatics tools to facilitate Darwin Core standardization and cleaning prior to online publication. VertNet (http://vertnet.org) is a leader in the development of workflows for data cleaning and publication in the natural history collections community. Likewise, Arctos (http://arctosdb.org) is a leader in providing museums with collaborative, community-driven solutions to managing information in their collections. Arctos and VertNet have a long history of working together to publish data – e.g., all collections in Arctos are published to data aggregators through DarwinCore Archives hosted on the VertNet Integrated Publishing Toolkit. Recently, this relationship has expanded to involve greater synergy for collections who are interested in managing their data in Arctos. Although Arctos has a suite of tools for checking and bulkloading data, the workflow now involves

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collaborating with VertNet to take advantage of VertNet-developed data migrators for standardization and cleaning. Data are first run through the migrators and reports are provided back to the collection for review. Collection staff then use these reports to update and improve data at the original source prior to migration into Arctos. This initial step has greatly facilitated the process of adding new collections into Arctos. Furthermore, collections benefit by being part of a community that provides expertise needed for improving and publishing their data. At a time when data discovery is more critical than ever for biodiversity research and conservation, collaborations such as these are essential for bridging gaps between the collection and informatics communities.

Keywords

biodiversity, data, data cleaning, database, collections, VertNet, Arctos, Darwin Core, data quality

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